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Koohgoli et al.

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[54]	PRIVATE	CELLULAR SYSTEM
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[56]		References Cited
	U.S. P	ATENT DOCUMENTS

3,760,106			
3,955,140	11/1976	Stephens et al	455/11
3,984,807	10/1976	Haemmig	455/11
4,028,500	6/1977	McClure et al	379/60
4.096,440	6/1978		455/33

 4,028,500
 6/1977
 McClure et al.
 379/60

 4,096,440
 6/1978
 Okasaka
 455/33

 4,210,780
 7/1980
 Hopkins et al.
 370/80

 4,562,572
 12/1985
 Goldman et al.
 370/80

 4,628,152
 12/1986
 Akerberg
 379/59

 4,661,972
 4/1987
 Kai
 379/57

 4,669,107
 5/1987
 Eriksson-Lennartsson
 379/60

 4,672,658
 9/1987
 Kavehrad et al.
 379/63

FOREIGN PATENT DOCUMENTS

0027636	2/1984	Japan	379/63
86/06915	11/1986	PCT Int'l Appl	379/61
2162404	1/1986	United Kingdom	379/59

OTHER PUBLICATIONS

Millicom Advertisement "Cellular Portable Telephone", 11/84.

"Cellular System Design: An Emerging Engineering Discipline", by J. F. Whitehead in IEEE Communications Magazine, FEb. 1986, vol. 24, No. 2.

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[57] ABSTRACT

A cellular mobile radio communication (e.g. telephone) system (hereinafter referred to as a private cellular system, PCS) that does not have the constraint of being a well defined, pre-planned system. The present invention differs from previous systems largely by the fact that it does not have to be well planned in advance. A user can simply install a base station virtually wherever he desires. Each base station is "intelligent" and produces a dynamic allocation. This of course means that if one were to install such a system, for example in an office building, no studies would be required. One would simply install a series of base stations.

11 Claims, 6 Drawing Sheets

